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THE
PLOTTER

CLACKAMAS COMPUTER APPLIED
TRAINING SOCIETY
NEWS LETTER
****
VOLUME 10   **   NUMBER 8
******
AUGUST   1992

COMPUTING THE FUTURE--
IN CLACKAMAS COUNTY
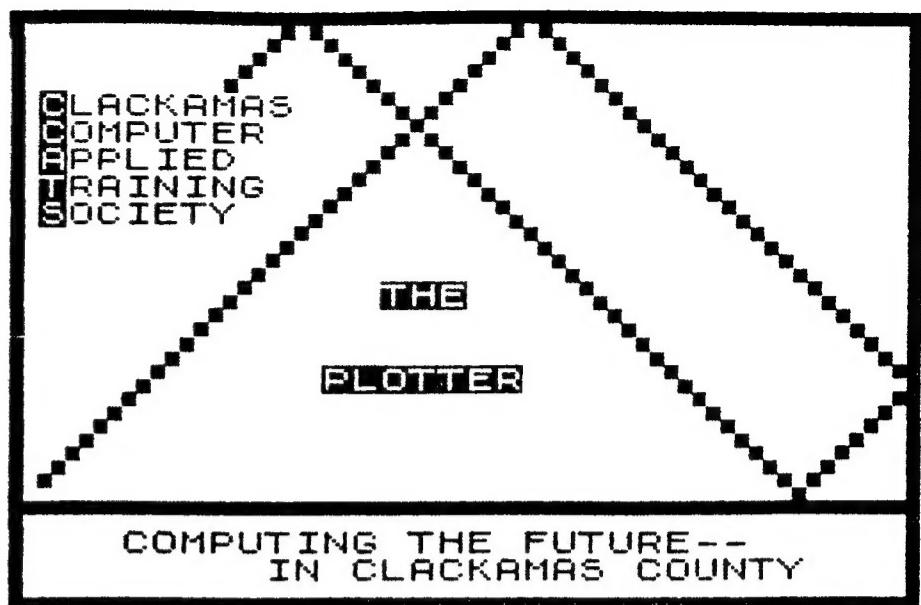
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TREASURER: ROD GOWEN
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                  ALICE DUNLOP

MEETING

The AUGUST meeting will be:

on: FRI., AUGUST 14 1992

MEETING   open at: 7:00 P.M.
in: COMMUNITY ROOM
    FAR WEST FEDERAL BANK
    OREGON CITY SHOPPING CENTER

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WHAT YOU WILL FIND IN THIS ISSUE:

JULY MEETING

The meeting was called to order at 7:50 PM by chairman Jack Armstrong at the Far West Bank meeting room. Seven members were present.

Under old business the Chairman reported that he had provided Rod Gowen with most of his copy work of past issues of The Plotter. Bill Dunlop has completed most of his copy work except QL programs. Alice Dunlop has completed her part of the copy work.

There was some discussion of power interupts particularly related to the recent lightning displays.

Under new business, Rod reported that it now appears safe to continue to arrange for future meetings with Far West Bank, continuing with the 2nd Friday meeting time. This depends upon reserving the room ahead of any others users. The Community College had given him erroneous information about the availability of a meeting room on Friday nights during the summer so it seems better to continue with our normal meeting time.

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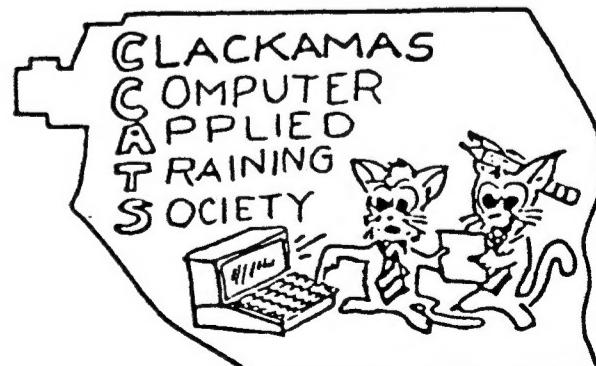
Rod reported that he will be selling an interface for the 2068 and 1000 computers that will permit the use of a standard IBM type keyboard. He hopes to have a demo model by fall. He will be advertising this interface when he can depend upon a supply. This interface will not disable the regular keyboard.

Rod also reported that he was pleased with a program for money management for the MSDOS clones. He will provide a review of this program for the newsletter.

It was reported that the Multnomah Library Assn. now has a bulletin board in operation. Operating details are not available for the meeting. Users should call the library office to obtain details.

The meeting was adjourned at 8:55 PM.

Dick F. Wagner
Secretary

BITS & BYTES
by: Rod Gowen

In this column I try to bring you the latest and complete information and news available to me regarding the world of TS computing. One way that I can accomplish this is if I have the support of you, the reader, in collecting news that may be of interest to other readers. If you have any news, rumors or other tidbits of information that fits this description, why not send it along? We will be watching!

NO NEWS=GOOD NEWS?!
Not in this case! If we don't have any news to report, then we have no purpose! I can sit here and rewrite old news for months if I have to, but wouldn't it be a lot more interesting if we could read something new? I know that I really enjoy sitting down with a good TS newsletter and finding out what the other groups around the country are up to. I guess I could re-print items from the other newsletters, but I have never had to resort to that in this column and would just as soon not have to now. If any of you readers have anything that you know and the rest of us may not know, PLEASE! send it in for us to print here! In the meantime, I will continue with what little I can come up with this month.

HAVE YOU WRITTEN?---
To Vulcan Computer Monthly yet? I certainly hope so. Take note! If we don't do something about it, we will have only ourselves to blame when there is no forum for the "orphan" computers! WE NEED YOUR HELP! ALL TS USERS AS WELL AS AMIGA, COMMODORE, TI-99, SANYO AND TRS80 USERS MUST UNITE! Write or call AT ONCE!

COMPUTER MONTHLY
P. O. BOX 55886
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205/388-9708

LOOK OUT! HERE COMES THE GUILT TRIP! If you don't do it now, you have no one to blame except yourself when your sources are all dead and gone!

BEST OF THE PLOTTER---
Is not being forgotten. We are working on editing the text and programs from all of those old issues. With over 110 issues having been printed, you can imagine how hard it was to narrow the material down to only 100 pages maximum. I think we will make it though. It looks like a couple of months longer than first thought though. It may be as late as October before we can get them ready. DON'T GIVE UP! We WILL get it ready for all of you who have expressed an interest and any who may do so in the future.

WE'VE MOVED AGAIN!--
BACK! That's right! We have moved our monthly meetings back to the FAR WEST FEDERAL BANK COMMUNITY ROOM in the Oregon City Shopping Center. Our old home! Reason? The college decided to close at 5PM Fridays and open at 7AM Mondays for the summer and we could not get a Friday night meeting room. On top of that, they could not even give us the same room that we had due to remodeling. So, a quick call to the bank revealed that they will probably have the communtiy room available until sometime next year. That means that we will be meeting on the second

Friday at our "old home" for the foreseeable future. See you there!

That's it for now!

See you next time. . .

SQUARE ROOTS

Dick Wagner

The program that generates square roots is probably moot as we have square root capability in our TS computers. This program is mainly of interest in its display of the progress made in arriving at the square root of a number by the division process. It is surprising that the answer is often within 5 tries.

The first try is a random try using a number between 0 and the number chosen (line 90). Then that guess is refined by division as many times as necessary to arrive at the correct number. The printing of the error is done to show how the computer works it out. The computer knows when to stop only when the error is zero, other wise it will keep repeating the same answer.

Readers will recall that the square root of a whole number is, when multiplied by itself, equals that number. This is the method used to arrive at any error that might exist in the answer. Just remember that electronic and mechanical calculators have accuracy limits.

This program requires little memory so it works on the TS 1000 and up.

The basis for this program is from the book "70 GAMES for the Timex/Sinclair 1000 and 1500" by Tim Hartnell.

```
WHAT NUMBER DO YOU WANT ME TO
FIND THE SQUARE ROOT OF?

THE SQUARE ROOT OF 32:
16.5
ERROR IS -240.25
9.219697
ERROR IS -53.002812
6.3452634
```

```
ERROR IS -8.2623681
5.6941976
ERROR IS -0.4238867
5.6569767
ERROR IS -.0013854057
5.6568543
ERROR IS -1.4901161E-8
5.6568542
ERROR IS 0
5.6568542
ERROR IS 0
THE SQUARE ROOT IS 5.6568542
```

```
10 REM TIM HARTNELL'S "SQUARE
ROOT SOLVER" IS THE BASIS OF THI
S PROGRAM
20 REM SOLVE SQUARE ROOT BY DI
VISION
40 PRINT "WHAT NUMBER DO YOU W
ANT ME TO   FIND THE SQUARE ROOT
OF?"
60 INPUT B
70 IF B<0 THEN GO TO 60
80 PRINT : PRINT "THE SQUARE R
OOT OF ";B;":"
90 LET A=INT (RND*B)+1
100 LET X=B/A
110 LET Y=(X+A)/2
120 PRINT Y
130 PRINT "ERROR IS ";ABS B-Y*Y
135 LET ERROR=ABS B-(Y*Y)
137 IF A=Y THEN GO TO 170
140 LET A=Y
150 GO TO 100
170 PRINT "THE SQUARE ROOT IS "
;Y
```

CORRECTION

One of our subscribers, J. B. Pegram, kindly points out an error in a correction we printed in the July issue of our newsletter. This pertained to having multiple inputs on one line.

GWBASIC accepts multiple inputs in the form

200 INPUT M,D,Y

The suggested correction for this was to use a separate input for each of 3 lines.

My mistake was in saying that Sinclair BASIC does not accept multiple statements in one line. As Mr. Pegram points out, Sinclair BASIC does accept multiple input

statements if the proper syntax is used. A review of the ZX Sectrum manual on PRINT and INPUT shows some of the information not included in the 2068 manual (some in appendix A.) The 2068 manual states that like PRINT, INPUT uses the same separators that PRINT uses. As Mr. Pegram illustrates in his short demonstration program, separators may be commas, semicolons or apostrophes.

Our thanks to Mr. Pegram. We appreciate knowing that subscribers and others are looking at our material and sometimes trying out the programs.

Dick F. Wagner, Editor


```
  10 REM J.B. Pegram, LOS ANGELE
S, CA
 100 REM This demonstration of t
he "INPUT" command may be useful
.
 110 REM The "INPUT" prompts are
 printed on the lower screen and
 await the proper reply.
 120 REM Several inputs may be e
ntered in sequence as long as th
e command is not ended by a colo
n.
 130 REM The input request can b
e separated by semi-colons; comm
as; or apostrophes. The semi-col
on leaves no space before the ne
xt print position. The comma tab
s to the next tab position for t
he next print position. The apos
trophy is the same as "ENTER and
 creates a new line for the next
 print position.
 200 INPUT "var1 as v1=";v1;" va
r2 as v2=";v2," var3 as v3= ";v3
'" var4 as string variable a$=
";a$' "var 5 as string variable
without quote marks at cursor re
ply position as b$= "; LINE b$
 210 PRINT "var1 = ";v1
 220 PRINT "var2 = ";v2
 230 PRINT "vqr3 = ";v3
 240 PRINT "var4 string variable
 a$ = ";a$
 250 PRINT "var5 =string variabl
e b$ = ";b$
```

TILES

This is a computerized old game where the player is to rearrange 15 letters of the alphabet in the format identified as "finished". "Original" is the display the player starts with. This can be altered by changing line 345.

The program appears to be cheat proof the way it is set up. It will not permit jumps.

The first step at each move is to select the letter to move into the vacant space by refering to the number code displayed. The second step is to identify location where the move is to be made to (the vacant spot). The codes are reference to the 16 locations and not the letters. Thus any other letters can be used as well as numbers. Using numbers can make it quite confusing.

The program has a counter to keep track of your moves. The author (K. Mahogany/ Tim Hartnell) claim the puzzle can be solved with about 40 moves. This is subject to question so give it a try.

```
  10 REM TILES
  20 REM K. MAHAGONY, 1982 (2K T
IMEX)
  30 GO SUB 330
  50 GO SUB 200
  90 PRINT AT 16,3;"WHICH ONE TO
MOVE??"
 100 INPUT X
 110 IF A(X)=CODE " " THEN GO TO
100
 120 PRINT AT 16,3;"          TO
WHERE?? "
 130 INPUT Y
 140 IF A(Y)<>CODE " " THEN GO T
O 130
 150 LET A(Y)=A(X)
 160 LET A(X)=CODE " "
 170 LET GO=GO+1
 180 GO TO 50
 200 REM ***PRINT OUT***
 210 PRINT AT 0,3;"GO NUMBER ";G
O
```

≫≫≫

```
220 PRINT
225 PRINT
230 PRINT CHR$ A(1);" ";CHR$ A(
2);" ";CHR$ A(3);" ";CHR$ A(4),"
  1 2  3 4 "
240 PRINT CHR$ A(5);" ";CHR$ A(
6);" ";CHR$ A(7);" ";CHR$ A(8),"
  5 6  7 8"
250 PRINT CHR$ A(9);" ";CHR$ A(
10);" ";CHR$ A(11);" ";CHR$ A(12
),  " 9 10 11 12"
260 PRINT CHR$ A(13);" ";CHR$ A
(14);" ";CHR$ A(15);" ";CHR$ A(1
6),"  13,14,15,16"
320 RETURN
330 REM ***INITIALIZE***
340 DIM A(16)
345 LET A$="DJNBGLAEO HMCKIF"
350 FOR B=1 TO 16
360 LET A(B)=CODE A$(B)
370 NEXT B
380 LET GO=1
410 RETURN
```

ORIGINAL	FINISHED
D J N B	A B C D
G L A E	E F G H
O H M	I J K L
C K I F	M N O

X—10 CONTROLLERS

Dick Wagner

The X-10 system designed for controlling electrical equipment through signal transmission over your 120 VAC house wiring has been on the market for quite some years. Present sophisticated equipment controls by using "receiver" electrical outlets and switches of various types. These receivers, except mechanical relay types, will not work with fluorescent light bulbs but function properly on resistive loads such as incandescent lights and heaters as well as transformer loads of some types, and some motors.

A wireless remote control is available to actuate the receivers. This is a true wireles device that uses a radio receiver to cause the wired receivers to operate.

With this meager background about the X-10 system sold by Radio Shack stores and some catalog companies, we now look at the controller part of the system, and particularly a new computer programmed controller, Model CP 290.

The Model CP 290 controller is shown only in the RS 1992 catalog. This unit comes complete with suitable programs on disk (3 1/2 and 5 1/4). The programs available are for IBM compatibles, Macintosh, Apple IIe /IIc and Commodore 64/128 computers. The catalog implies that IBM compatibles require the Deskmate program to be installed. This is only true if the user wishes icons for operation in place of text. Considering Deskmate retails for about $100 I desided I would live with what they gave me.

Programming by computer is easier than the older TV graphic system I used before (that controller gave up on the TV part). It is very easy to reprogram the system whenever a change is desired, just plug it into the serial port, load in the program and answer the selection choices.

The CP 290 controller has 8 keys that can be selected for 8 devices. The system is capable of handling 256 devices! There are 32 house codes with 8 numbers per house code. Once a code is set up for a device the keys will manually operate ON/OFF any of the 8 devices, separate from the programmed controller operation.

Lights can be dimmed by the program but not by the manual switches. I have another type of manual controller that does permit light dimming. Dimming is handy to assure lights will not burn out if I am gone for several weeks.

This latest addition expands the use of my computer without dedicating the computer to that task as the controller is removed fom the computer and plugged into a suitable AC receptical, all programmed and safely retained with a standby battery.

the plotter

pc page

by: Rod Gowen

Have you been looking at financial programs for your personal or small business use? I have been looking at various shareware and commercial possibilities for quite some time now. It seems that they all have favorable points as well as negative points. I guess that part of this lies in what one is looking for as well as what the author of the program thinks we are looking for. In my case, I wanted certain things to be present. I wanted it to keep track of as much of my financial information as possible. I wanted it to be able to write and print my checks, AND, it had to be able to adapt to the checks that I am already using. It had to have a "net worth" function. My top priority, however, is in color choices. It absolutely must have complete color control of every aspect of the program!

This is not going to be an in-depth review of all of the programs that I have tried out. I will just try to list the names of the ones that I have tried and the name of the one that finally seems to be filling the bill for me.

Some of the first programs that I tried were more or less limited to a single or only a couple of functions. Some were checkbook managers only and some had a budget feature built in. Some were a type of database that kept track of your budget. Others were meant to run in a spreadsheet. Most of the early programs that I tried out were shareware that I downloaded from various BBS's.

They had names like: FASTBUCKS, CHECKBOOK V3.0, FINANCIAL ADVISOR, FINANCIAL WORKSHEET, NET WORTH FOR LOTUS, DOLLAR$, FINANCES, EASY-BUCKS, FM3 and EXPRESS CHECK. I finally started using and paid the registration fee for ExpressCheck. It keep track of the checkbooks and budget categories so that you could print out reports of all types as well as reconciling the monthly bank statements. It did allow total customization of both colors and check printing. It did not, however, do much for overall finances or net worth.

Soon I started trying commercial programs. There are a lot of them out there, so I did some research first and saved some time and money. The first one that I seriously tested was QUICKEN 5.0 through their $8 "test drive" deal as advertised on TV. For $8 they would send me the program to try, and, if I did not like it, for any reason, I had only to send a postcard back and that was it. No further charges would be added to my credit card. It was not even necessary to return the program. After being totally frustrated by the inability to change the colors of the input area in the check register and the fact that it did not support the DELUXE personal tractor-feed checks that I use, I had no choice but to say "No Thanks!".

I next looked at ANDREW TOBIAS' MANAGING YOUR MONEY V8.0. This package produced and sold by MECA software and they offered the same deal as Quicken. Try it for 35 days for $8, and, if not satisfied for any reason, simply send the postcard back and say "No Thanks!". Otherwise, they would charge my bankcard for $49.95 in full payment for the package which retails for $199.95.

Upon receipt of this package, I immediately installed it on my hard drive. Look out here! It requires 3 MEGABYTES of disk space to install! As soon as it was installed, I was ushered into the program and found, to my extreme delight, that all of the colors were easily customized to my liking. I also found that it listed the DELUXE personal sized check on the built-in list of supported checks. It supports all of the things I wanted, and a lot more!

It not only does a net worth report, but also supports most tax forms, your portfolios and even your life insurance investments. It can be set up with as many budget categories as you need for either a small business or a home finance management program. It will track your investment portfolio and help you keep track of the value of your insurance policies as well as helping you figure out exactly what you should be paying for your insurance coverage.

When using the checkbook, you will enjoy the ease of input and this is enhanced by the fact that it memorizes entries and will automatically complete an entry after you have entered the first 2 letters of the payee's name. All sections are totally integrated and when a figure is changed in one place the totals change wherever needed.

You also have a built-in word processor, or, if you prefer, you can tell it to use your favorite, such as WORD PERFECT or WORDSTAR. It includes a complete mailing list manager which will even print the address on the envelopes.

There is probably a lot more that I could tell you about it, but suffice it to say that I am sold on this package and will be using it from now on.

If you want more info on the information in this column, feel free to write or call RMG or to me, in care of the newsletter.

Rod.

```
  2 REM FEATHERS
  5 REM Converted from TRS to
TS2068 by Ted Knyszek
 20 LET xp=0: LET yp=0
 30 LET s=PI/7.5: LET d=25
 40 FOR t=0 TO 1.089 STEP (s/20
)
 50 LET d=d+3
 60 FOR i=t TO (t+PI) STEP s
 70 LET r=d*SIN (i)+.5
 80 LET x=r*SIN (i)+70
 90 LET y=r*COS (i)+86
100 IF i=0 THEN GO TO 140
110 LET xp=xp+.2: LET yp=yp+.2
120 PLOT x,y
130 DRAW (xp-x),(yp-y)
140 NEXT i: NEXT t
```
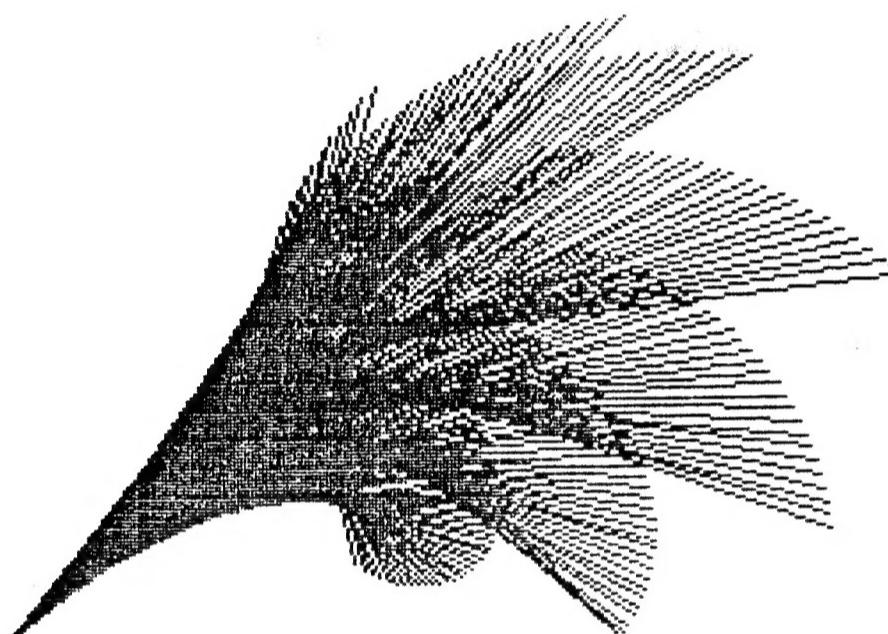
−NOTICE−

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